

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-30. (Canceled).

31. (Currently Amended) An electrostatic chuck for electrostatically attracting a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, including a rectangular substrate mounting surface for receiving the rectangular substrate, said electrostatic chuck comprising a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the electrostatic chuck in parallel to the substrate mounting surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck, and longer sides of each of the rod-like electrodes are parallel to longer sides of adjacent rod-like electrodes, wherein the substrate mounting surface and the rod-like electrodes are configured said electrostatic chuck further comprising means for mounting the rectangular substrate on the electrostatic chuck so that, when the rectangular substrate is mounted on the substrate mounting surface, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of said shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate,
said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular

substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

32. (Currently Amended) An electrostatic chuck for electrostatically attracting a rectangular-substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, including a rectangular substrate mounting surface for receiving the rectangular substrate, said electrostatic chuck comprising a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the electrostatic chuck in parallel to the substrate mounting surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck, and longer sides of each of the rod-like electrodes are parallel to longer sides of adjacent rod-like electrodes, wherein the substrate mounting surface and the rod-like electrodes are configured said electrostatic chuck further comprising means for mounting the rectangular substrate on the electrostatic chuck so that, when the rectangular substrate is mounted on the substrate mounting surface, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of said shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, and wherein said rod-like electrodes are configured to be connected to wiring so that said electrostatic chuck will be mono-pole type or bi-pole type, said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and

with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

33. (Currently Amended) An electrostatic chuck for electrostatically attracting a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, including a rectangular substrate mounting surface for receiving the rectangular substrate, said electrostatic chuck comprising a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the electrostatic chuck in parallel to the substrate mounting surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck, and longer sides of each of the rod-like electrodes are parallel to longer sides of adjacent rod-like electrodes, wherein the substrate mounting surface and the rod-like electrodes are configured said electrostatic chuck further comprising means for mounting the rectangular substrate on the electrostatic chuck so that, when the rectangular substrate is mounted on the substrate mounting surface, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of said shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, wherein said rod-like electrodes are comprised of rod-like base materials, and thermally sprayed films including high-purity ceramics are formed on said rod-like base materials, said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the

rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

34. (Currently Amended) An electrostatic chuck for electrostatically attracting a rectangular-substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, including a rectangular substrate mounting surface for receiving the rectangular substrate, said electrostatic chuck comprising a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the electrostatic chuck in parallel to the substrate mounting surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck, and longer sides of each of the rod-like electrodes are parallel to longer sides of adjacent rod-like electrodes, said electrostatic chuck further comprising means for mounting the rectangular substrate on the electrostatic chuck, wherein the substrate mounting surface and the rod-like electrodes are configured so that, when the rectangular substrate is mounted on the substrate mounting surface, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of said shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, wherein said rod-like electrodes are comprised of rod-like base materials, wherein cross-sections with respect to a vertical cut-through of said rod-like base materials are in stepped shapes, and wherein said rod-like electrodes are arranged with a predetermined gap (clearance) between adjacent rod-like electrodes, said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer

side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

35. (Currently Amended) An electrostatic chuck for electrostatically attracting a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, including a rectangular substrate mounting surface for receiving the rectangular substrate, said electrostatic chuck comprising a plurality of rod-like electrodes having shorter sides and longer sides ~~and oriented along the electrostatic chuck in parallel to the substrate mounting surface,~~ wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck, and longer sides of each of the rod-like electrodes are parallel to longer sides of adjacent rod-like electrodes, ~~wherein the substrate mounting surface and the rod-like electrodes are configured~~ said electrostatic chuck further comprising means for mounting the rectangular substrate on the electrostatic chuck so that, when the rectangular substrate is mounted on the substrate mounting surface, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of the shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate, wherein said rod-like electrodes are comprised of rod-like

base materials, and cross-sections with respect to a vertical cut-through of said rod-like base materials are arranged like roofing tiles, each having a curved convex portion on one side and a curved concave portion on the other side, and wherein each of said convex portions is arranged with a predetermined gap (clearance) between said convex portion and said concave portion of an adjacent rod-like electrode.

36. (Currently Amended) An electrostatic chuck for electrostatically attracting a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, including a rectangular substrate mounting surface for receiving the rectangular substrate, said electrostatic chuck comprising a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the ~~electrostatic chuck in parallel to the substrate mounting surface,~~ wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck, and longer sides of each of the rod-like electrodes are parallel to longer sides of adjacent rod-like electrodes, ~~wherein the substrate mounting surface and the rod-like electrodes are configured~~ said electrostatic chuck further comprising means for mounting the rectangular substrate on the electrostatic chuck so that, when the rectangular substrate is mounted on the substrate mounting surface, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of said shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, wherein said rod-like electrodes are comprised of rod-like base materials, and said rod-like base materials include high-purity isotropic graphite.

_____ said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

37. (Currently Amended) An electrode structure for an electrostatic chuck for electrostatically attracting a rectangular-substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, including a ~~rectangular-substrate mounting surface for receiving the rectangular-substrate, said electrode structure being comprised of a plurality of rod-like electrodes having shorter sides and longer sides and oriented along the electrostatic chuck in parallel to the substrate mounting surface, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the electrostatic chuck, and longer sides of each of the rod-like electrodes are parallel to longer sides of adjacent rod-like electrodes, wherein the substrate mounting surface and the rod-like electrodes are configured~~ said electrostatic chuck further comprising means for mounting the rectangular substrate on the electrostatic chuck so that, when the rectangular substrate is mounted on the substrate mounting surface, the rod-like electrodes will be disposed so that one of the shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, and

wherein each of the rod-like electrodes includes high-purity ceramic that is thermally sprayed on a surface of rod-like base materials.

said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

38. (Currently Amended) An electrode structure according to claim 37, wherein cross-sections with respect to a vertical cut-through of said base materials are in rectangular shapes.

39. (Currently Amended) An electrode structure according to claim 37, wherein cross-sections with respect to a vertical cut-through of said base materials are in rectangular shapes with wider widths than lengths.

40. (Currently Amended) An electrode structure according to claim 37, wherein cross-sections of with respect to a vertical cut-through said base materials are in stepped shapes.

41. (Currently Amended) An electrode structure according to claim 37, wherein cross-sections with respect to a vertical cut-through of said base materials are arranged like roofing tiles having a curved convex portion on one side and a curved concave portion on the other side.

42. (Previously Presented) An electrode structure according to claim 37, wherein said base materials are comprised of high-purity isotropic graphite.

43. (Currently Amended) A treating system provided with a rectangular substrate stage for receiving a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, wherein said rectangular substrate stage comprises a plurality of rod-like electrodes each having shorter sides and longer sides ~~and oriented along the rectangular substrate stage~~, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; the longer sides of each of the rod-like electrodes are parallel to the longer sides of adjacent rod-like electrodes; ~~and a~~ and the rectangular substrate is subjected to be electrostatically attracted by the plurality of rod-like electrodes; ~~wherein the rectangular substrate stage and the rod-like electrodes are configured~~ said rectangular substrate stage further comprising means for mounting the rectangular substrate on the rectangular substrate stage so that, when the rectangular substrate is mounted on the rectangular substrate stage, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of the shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

44. (Currently Amended) A treating system provided with a rectangular substrate stage for receiving a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, wherein said rectangular substrate stage comprises a plurality of rod-like electrodes each having shorter sides and longer sides ~~and oriented along the rectangular substrate stage~~, wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; the longer sides of each of the rod-like electrodes are parallel to the longer sides of adjacent rod-like electrodes; and a rectangular substrate is subjected to be electrostatically attracted by the plurality of rod-like electrodes; ~~wherein the rectangular substrate stage and the rod-like electrodes are configured~~ said rectangular substrate stage further comprising means for mounting the rectangular substrate on the rectangular substrate stage so that, when the rectangular substrate is mounted on the rectangular substrate stage, the rod-like electrodes will be disposed along an edge portion of the rectangular substrate to be treated so that one of the shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, and wherein said rod-like electrodes are configured to be connected to wiring so that said rod-like electrodes will be mono-pole or bi-pole type,

said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

45. (Currently Amended) A treating system provided with a rectangular substrate stage for electrostatically attracting a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, wherein said rectangular substrate stage comprises a plurality of rod-like electrodes each having shorter sides and longer sides ~~and oriented along the rectangular substrate stage,~~ wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; the longer sides of each of the rod-like electrodes are parallel to the longer sides of adjacent rod-like electrodes; and a rectangular substrate is subjected to be electrostatically attracted by the plurality of rod-like electrodes; ~~wherein the rectangular substrate stage and the rod-like electrodes are configured~~ said rectangular substrate stage further comprising means for mounting the rectangular substrate on the rectangular substrate stage so that, when the rectangular substrate is mounted on the rectangular substrate stage, the rod-like electrodes will be disposed along an edge portion of said rectangular substrate to be treated so that one of the shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate , wherein said rod-like electrodes are comprised of rod-like base materials, and wherein thermally sprayed films comprised of high-purity ceramics are formed on surfaces of said rod-like base materials,

said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

46. (Currently Amended) A treating system provided with a rectangular substrate stage for electrostatically attracting a rectangular substrate which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, wherein said rectangular substrate stage comprises a plurality of rod-like electrodes each having shorter sides and longer sides ~~and oriented along the rectangular substrate stage,~~ wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; the longer sides of each of the rod-like electrodes are parallel to the longer sides of adjacent rod-like electrodes; and a rectangular substrate is subjected to be electrostatically attracted by the plurality of rod-like electrodes; ~~wherein the rectangular substrate stage and the rod-like electrodes are configured~~ said rectangular substrate stage further comprising means for mounting the rectangular substrate on the rectangular substrate stage so that, when the rectangular substrate is mounted on the rectangular substrate stage, the rod-like electrodes will be disposed along an edge portion of said rectangular substrate to be treated so that one of the shorter sides of each of said rod-like electrode extends in parallel to a longer side of said rectangular substrate , wherein said rod-like electrodes are comprised of rod-like base materials, wherein cross-sections with respect to a vertical cut-through of said rod-like base materials are in stepped shapes, and wherein said rod-like electrodes are arranged with a predetermined gap (clearance) between adjacent rod-like electrodes,

said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular

substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

47. (Currently Amended) A treating system provided with a rectangular substrate stage for electrostatically attracting a ~~rectangular substrate~~ which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, wherein said rectangular substrate stage comprises a plurality of rod-like electrodes each having shorter sides and longer sides ~~and oriented along the rectangular substrate stage,~~ wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; the longer sides of each of the rod-like electrodes are parallel to the longer sides of adjacent rod-like electrodes; and a rectangular substrate is subjected to be electrostatically attracted by the plurality of rod-like electrodes; ~~wherein the rectangular substrate stage and the rod-like electrodes are configured~~ said rectangular substrate stage further comprising means for mounting the rectangular substrate on the rectangular substrate stage so that, when the rectangular substrate is mounted on the rectangular substrate stage, the rod-like electrodes will be disposed along an edge portion of said rectangular substrate to be treated so that one of the shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, wherein said rod-like electrodes are comprised of rod-like base materials, wherein cross-sections with respect to a vertical cut-through of said rod-like base materials are arranged like roofing tiles, each having a curved convex portion on one side and a curved concave portion on the other side, and wherein said convex portion is arranged with a predetermined gap (clearance) between said convex portion and said concave portion of an adjacent rod-like electrode.

said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.

48. (Currently Amended) A treating system provided with rectangular substrate stage for electrostatically attracting a ~~rectangular-substrate~~ which is rectangular when viewed in a planar view, and which has a longer side and a shorter side, wherein said rectangular substrate stage comprises a plurality of rod-like electrodes each having shorter sides and longer sides ~~and oriented along the rectangular substrate stage,~~ wherein shorter sides of each of said rod-like electrodes are oriented toward outside the rectangular substrate stage; the longer sides of each of the rod-like electrodes are parallel to the longer sides of adjacent rod-like electrodes; and a rectangular substrate is subjected to be electrostatically attracted by the plurality of rod-like electrodes; ~~wherein the rectangular substrate stage and the rod-like electrodes are configured~~ said rectangular substrate stage further comprising means for mounting the rectangular substrate on the rectangular substrate stage so that, when the rectangular substrate is mounted on the rectangular substrate stage, the rod-like electrodes will be disposed along an edge portion of said rectangular substrate to be treated so that one of the shorter sides of each of said rod-like electrodes extends in parallel to a longer side of said rectangular substrate, wherein

said rod-like electrodes are comprised of rod-like base materials, and wherein said

rod-like base materials include high-purity isotropic graphite,

said means comprising configuring the rod-like electrode and locating them relative to one another to form a substrate mounting surface comprised of the rod-like electrodes, which substrate mounting surface has overall rectangular dimensions with a longer side equal to or greater in length than the length of the rectangular substrate and with a shorter side equal to or greater in length than the shorter side of the rectangular substrate.